

Appendix I

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized Regression	
Level	QI & Validation Scale	Coefficient	p-value
	ADL decline (CHSRA; ADL01)		
1	Monitor Change in Function/Cognitive Care VAL2+		
1	Incontinence Management VAL32+		
1	Cont Ed Fx Decline VAL34+		
1	Focus on Incontinence VAL36+		
1	CDCPI-Functional VAL37+	-0.271	0.001 ‡
1	CDCPI3-Cross Domain Quality Response VAL42+		
1	Observation of Movement Scale VAL72+		
1	OT+OT Asst FTE/100 Beds VAL85+		
1	Total involvement in Care Planning VAL147+		
1	ADL Decline Change (based on VAL46) VAL154+		
2	General Management Instability VAL10-	0.144	0.091 ‡
2	Facility Management Contract Change VAL11-		
2	Effort at Mobility Enhancement VAL35+		
2	Ownership Change VAL49-		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+		
2	PT Asst FTE/100 Beds VAL83+		
2	Level of OT PT Staffing VAL87+	0.166	0.065
2	ADLdec Improvement Scale VAL109+	-0.169	0.046 ‡
2	PT FTE/100 Beds VAL146+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
	ADL decline following improvement (MEGAQI; ADL02)		
1	Monitor Change in Function/Cognitive Care VAL2+		
1	Incontinence Management VAL32+	-0.158	0.064 ‡
1	Cont Ed Fx Decline VAL34+		
1	Focus on Incontinence VAL36+	-0.209	0.014 ‡
1	CDCPI-Functional VAL37+	-0.294	0.000 ‡
1	CDCPI3-Cross Domain Quality Response VAL42+	-0.191	0.026 ‡
1	Observation of Movement Scale VAL72+	-0.250	0.003 ‡
1	OT+OT Aasst FTE/100 Beds VAL85+		
1	Total involvement in Care Planning VAL147+		
1	ADL Decline Change (based on VAL46) VAL154+		
2	Level of OT PT Staffing VAL87+		
2	ADLdec Improvement Scale VAL109+		
2	PT FTE/100 Beds VAL146+		
	ADL imp. in residents with capacity (MEGAQI; ADL03)		
1	CDCPI-Functional VAL37+		
1	CDCPI3-Cross Domain Quality Response VAL42+		
1	Observation of Movement Scale VAL72+		
1	OT+OT Aasst FTE/100 Beds VAL85+		
1	Total involvement in Care Planning VAL147+		
1	ADL Improvement Change (based on VAL46) VAL153+		
1	Match of Chart & Care Plan (ADL Improvement) VAL171+		
2	General Management Instability VAL10-		
2	Effort at Mobility Enhancement VAL35+		
2	Ownership Change VAL49-		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+		
2	PT Asst FTE/100 Beds VAL83+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
2	Level of OT PT Staffing VAL87+		
2	ADLimp Improvement Scale VAL108+		
2	PT FTE/100 Beds VAL146+		
Behavior problem prevalence, high & low risk (CHSRA; BEH01)			
1	Complex Mental Health Care on Site VAL1+		
1	Behavioral Items VAL18+		
1	Cognitive Behavioral Care Practices VAL88+		
1	BEH Change (based on VAL46) VAL152+2		
2	Licensed Nurse Involved in Care Planning VAL6+	-0.152	0.075 ‡
2	Facility Management Contract Change VAL11-		
2	Formal Communication VAL17+		
2	CQI for pain VAL26+		
2	CDCPI-Ambiance VAL41+		
2	CDCPI3-Cross Domain Quality Response VAL42+		
2	Percent Single Bedded Rooms, Deciles VAL44+		
2	CNA Involved in Care Planning VAL57+		
2	Record of MH Prof VAL65+	0.174	0.070 †
2	Presence of MH prof VAL66+		
2	Number of Policies Reviewed with New Hires VAL101+		
2	Behavior Improvement Scale VAL107+	0.309	0.000
2	Total involvement in Care Planning VAL147+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
	Behavior problem prevalence, high risk (CHSRA; BEH02)		
1	Complex Mental Health Care on Site VAL1+		
1	Behavioral Items VAL18+		
1	Cognitive Behavioral Care Practices VAL88+		
1	BEH Change (based on VAL46) VAL152+		
2	Licensed Nurse Involved in Care Planning VAL6+		
2	Facility Management Contract Change VAL11-		
2	Formal Communication VAL17+		
2	CQI for pain VAL26+		
2	CDCPI-Ambiance VAL41+		
2	CDCPI3-Cross Domain Quality Response VAL42+		
2	Percent Single Bedded Rooms, Deciles VAL44+		
2	CNA Involved in Care Planning VAL57+		
2	Record of MH Prof VAL65+		
2	Presence of MH prof VAL66+		
2	Number of Policies Reviewed with New Hires VAL101+		
2	Behavior Improvement Scale VAL107+	0.277	0.001
2	Total involvement in Care Planning VAL147+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
	Behavior problem prevalence, low risk (CHSRA; BEH03)		
1	Complex Mental Health Care on Site VAL1+		
1	Behavioral Items VAL18+		
1	Cognitive Behavioral Care Practices VAL88+		
1	BEH Change (based on VAL46) VAL152+		
2	Licensed Nurse Involved in Care Planning VAL6+		
2	Facility Management Contract Change VAL11-		
2	Formal Communication VAL17+		
2	CQI for pain VAL26+		
2	CDCPI-Ambiance VAL41+		
2	CDCPI3-Cross Domain Quality Response VAL42+		
2	Percent Single Bedded Rooms, Deciles VAL44+		
2	CNA Involved in Care Planning VAL57+		
2	Record of MH Prof VAL65+		
2	Presence of MH prof VAL66+		
2	Number of Policies Reviewed with New Hires VAL101+		
2	Behavior Improvement Scale VAL107+	0.351	0.004
2	Total involvement in Care Planning VAL147+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
	Behavior problem change (LTCQ; BEH04)		
1	Complex Mental Health Care on Site VAL1+		
1	Behavioral Items VAL18+		
1	Presence of MH prof VAL66+		
1	Cognitive Behavioral Care Practices VAL88+		
1	BEH Change (based on VAL46) VAL152+		
2	General Management Instability VAL10-		
2	Facility Management Contract Change VAL11-		
2	Formal Communication VAL17+		
2	Percent Single Bedded Rooms, Deciles VAL44+		
2	Ownership Change VAL49-		
2	Record of MH Prof VAL65+		
2	Behavior Improvement Scale VAL107+		
	Low BMI prevalence (MEGAQI; BMI0X)		
1	Formal Communication VAL17+		
1	Nutrition CQI VAL79+		
1	% Res w/Tx Plans for Weight Loss VAL81+	0.189	0.026
1	WGT Change (based on VAL46) VAL160+	0.199	0.020 †
2	Cont Ed Fx Decline VAL34+		
2	5%+ RN, LPN Float, Contract VAL53-		
2	Lic Staff turnover last 6mo (% ,Deciles) VAL55-		
2	Number of Policies Reviewed with New Hires VAL101+		
2	LowBMI Improvement Scale VAL116+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
Prevalence of burns, abrasions, bruises (MEGAQI; BUR0X)			
1	Use of QA nurse VAL16+		
1	Skin Care Preventive Stratgz VAL29+		
1	Skin Care Prev Stratgz walk-through VAL31+		
1	Observed PU, Burns Tx & Prevention VAL77+		
1	Training & Policy for Suspicious Skin VAL99+	-0.159	0.061 ‡
1	BUR Change (based on VAL46) VAL166+	0.260	0.002 †
1	Match of Chart & Care Plan VAL174+		
2	Complex Mental Health Care on Site VAL1+		
2	Formal Communication VAL17+		
2	BurnTear Improvement Scale VAL122+		
Indwelling urinary catheter change (LTCQ; CAT01)			
1	Facility Management Contract Change VAL11-	0.196	0.020 ‡
1	Incontinence Management VAL32+		
1	Focus on Incontinence VAL36+		
1	30%+ Six Mo CNA Turnover VAL56-		
1	Focus on Catheter VAL74+		
1	CAT Change (based on VAL46) VAL161+		
2	General Management Instability VAL10-	0.150	0.075 ‡
2	Screening tools for infections VAL14+		
2	Use of QA nurse VAL16+		
2	Ownership Change VAL49-	0.159	0.060 ‡
2	DON employed <12M VAL51-		
2	IUCath Improvement Scale VAL117+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
Catheter prevalence (CHSRA; CAT02)			
1	Facility Management Contract Change VAL11-	0.315	0.000 †
1	30%+ Six Mo CNA Turnover VAL56-		
1	Focus on Catheter VAL74+	0.179	0.034
2	Screening tools for infections VAL14+		
2	Use of QA nurse VAL16+		
2	DON employed <12M VAL51-		
Bowel & bladder incontinence prevalence, high & low risk (CHSRA; CNT01)			
1	Incontinence Management VAL32+		
1	Focus on Incontinence VAL36+		
1	BLA Change (based on VAL46) VAL162+		
1	BOW Change (based on VAL46) VAL163+		
2	General Management Instability VAL10-		
2	Effort at Mobility Enhancement VAL35+		
2	Ownership Change VAL49-		
2	Num CQI Approaches in Use VAL64+		
2	Focus on Catheter VAL74+		
2	Direct Care Staff Involved for Residents who Fall VAL98+		
2	BladCont Improvement Scale VAL118+		
2	BowlCont Improvement Scale VAL119+		
Bowel incontinence change (LTCQ; CNT02)			
1	Incontinence Management VAL32+		
1	Focus on Incontinence VAL36+	-0.197	0.024 †
1	BOW Change (based on VAL46) VAL163+		
2	Skin Care Preventive Stratgz VAL29+		
2	Skin Care Prev Stratgz walk-through VAL31+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
2	Effort at Mobility Enhancement VAL35+		
2	Num CQI Approaches in Use VAL64+		
2	BowlCont Improvement Scale VAL119+		
	Bowel & bladder incont. prev, high risk (CHSRA; CNT05)		
1	Incontinence Management VAL32+		
1	Focus on Incontinence VAL36+	-0.287	0.014 ‡
1	BLA Change (based on VAL46) VAL162+		
1	BOW Change (based on VAL46) VAL163+		
2	General Management Instability VAL10-		
2	Effort at Mobility Enhancement VAL35+		
2	Ownership Change VAL49-		
2	Num CQI Approaches in Use VAL64+		
2	Focus on Catheter VAL74+	-0.339	0.003 ‡
2	Direct Care Staff Involved for Residents who Fall VAL98+		
2	BladCont Improvement Scale VAL118+	-0.226	0.054 ‡
2	BowlCont Improvement Scale VAL119+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
	Bowel & bladder incont. prev, low risk (CHSRA; CNT06)		
1	Incontinence Management VAL32+		
1	Focus on Incontinence VAL36+		
1	BLA Change (based on VAL46) VAL162+		
1	BOW Change (based on VAL46) VAL163+		
2	General Management Instability VAL10-		
2	Effort at Mobility Enhancement VAL35+		
2	Ownership Change VAL49-		
2	Num CQI Approaches in Use VAL64+		
2	Focus on Catheter VAL74+		
2	Direct Care Staff Involved for Residents who Fall VAL98+		
2	BladCont Improvement Scale VAL118+		
2	BowlCont Improvement Scale VAL119+		
	Bladder incontinence change (LTCQ; CNT03)		
1	Focus on Incontinence VAL36+		
1	Focus on Catheter VAL74+	-0.151	0.081 ‡
1	BLA Change (based on VAL46) VAL162+		
2	Skin Care Preventive Stratgz VAL29+		
2	Skin Care Prev Stratgz walk-through VAL31+		
2	Cont Ed Fx Decline VAL34+		
2	Effort at Mobility Enhancement VAL35+		
2	Num CQI Approaches in Use VAL64+		
2	Frequency of Comprehensive Assessments VAL80+		
2	BladCont Improvement Scale VAL118+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
	Urinary tract infection prevalence (CHSRA; CNT04)		
1	Facility Management Contract Change VAL11-	0.190	0.025 ‡
1	Screening tools for infections VAL14+		
1	Use of QA nurse VAL16+		
1	INF Change (based on VAL46) VAL164+	0.159	0.061 †
2	NP on staff VAL19+		
2	Cont Ed Fx Decline VAL34+		
2	DON employed <12M VAL51-		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+		
2	5%+ RN, LPN Float, Contract VAL53-		
2	Lic Staff turnover last 6mo (%Deciles) VAL55-	0.229	0.009 ‡
2	Num CQI Approaches in Use VAL64+		
2	Long Stay Staff deciles VAL90+		
2	Number of Policies Reviewed with New Hires VAL101+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
	Cognition change (LTCQ; COG01)		
1	Complex Mental Health Care on Site VAL1+		
1	Monitor Change in Function/Cognitive Care VAL2+	-0.155	0.069 ‡
1	Preventative Activities VAL7+		
1	Polypharmacy Monitoring VAL8+		
1	CDCPI-Psychosocial VAL39+		
1	CDCPI3-Cross Domain Quality Response VAL42+		
1	Formal Delirium/Depression Approach VAL67+		
1	Cognitive Behavioral Care Practices VAL88+	-0.145	0.089 ‡
1	COG Change (based on VAL46) VAL148+	0.179	0.037 †
1	Match of Chart & Care Plan VAL169+		
2	Licensed Nurse Involved in Care Planning VAL6+		
2	Aggressive Cog/Com Care Strategy VAL9+		
2	Behavioral Items VAL18+	-0.185	0.029 ‡
2	CDCPI-Ambiance VAL41+		
2	CDCPI3-Cross Domain Quality Response VAL42+		
2	CNA Involved in Care Planning VAL57+		
2	Frequency of Comprehensive Assessments VAL80+		
2	OT+OT Aasst FTE/100 Beds VAL85+	0.169	0.059
2	COGimp Improvement Scale VAL103+	-0.223	0.008 ‡
2	Total involvement in Care Planning VAL147+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
Communication change (LTCQ; COM01)			
1	Complex Mental Health Care on Site VAL1+		
1	Monitor Change in Function/Cognitive Care VAL2+		
1	Preventative Activities VAL7+		
1	Polypharmacy Monitoring VAL8+	-0.144	0.091 ‡
1	Informal Pathways Communication VAL97+		
1	COM Change (based on VAL46) VAL149+		
2	Licensed Nurse Involved in Care Planning VAL6+		
2	Aggressive Cog/Com Care Strategy VAL9+		
2	Comm Improvement Scale VAL104+		
2	Total involvement in Care Planning VAL147+		
New or persistent delirium change (MEGAQI; DEL0X)			
1	Aggressive Cog/Com Care Strategy VAL9+		
1	CDCPI-Clinical Complications VAL40+		
1	CDCPI3-Cross Domain Quality Response VAL42+		
1	Presence of MH prof VAL66+		
1	Formal Delirium/Depression Approach VAL67+		
1	DEL Change (based on VAL46) VAL150+		
2	Complex Mental Health Care on Site VAL1+		
2	Polypharmacy Monitoring VAL8+	-0.140	0.098 ‡
2	Record of MH Prof VAL65+		
2	Personalized Rooms VAL70+		
2	Frequency of Comprehensive Assessments VAL80+		
2	Cognitive Behavioral Care Practices VAL88+	-0.227	0.007 ‡
2	Vigilance in Monitoring Psyc Status VAL100+		
2	Delirium Improvement Scale VAL105+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
Antipsychotic prevalence, high & low risk (CHSRA; DRG01)			
1	Med Dir reviews Drugs last 30 days VAL20+		
1	Num CQI Approaches in Use VAL64+		
1	DRG Change (based on VAL46) VAL157+		
2	Polypharmacy Monitoring VAL8+		
2	Medications Committee VAL25+		
2	Antipsyc Improvement Scale VAL112+	0.198	0.020
Antipsychotic prevalence high risk (CHSRA; DRG02)			
1	Med Dir reviews Drugs last 30 days VAL20+		
1	Num CQI Approaches in Use VAL64+	0.332	0.036
1	DRG Change (based on VAL46) VAL157+		
2	Polypharmacy Monitoring VAL8+		
2	Medications Committee VAL25+		
2	Antipsyc Improvement Scale VAL112+		
Antipsychotic prevalence low risk (CHSRA; DRG03)			
1	Med Dir reviews Drugs last 30 days VAL20+		
1	Num CQI Approaches in Use VAL64+		
1	DRG Change (based on VAL46) VAL157+		
2	Polypharmacy Monitoring VAL8+	-0.173	0.043 †
2	Medications Committee VAL25+		
2	Antipsyc Improvement Scale VAL112+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
	Falls change (LTCQ; FAL01)		
1	Communication of Falls VAL5+	0.182	0.032 ‡
1	Use of QA nurse VAL16+		
1	Formal Communication VAL17+	0.168	0.048 ‡
1	Direct Care Staff Involved for Residents who Fall VAL98+		
1	Total involvement in Care Planning VAL147+		
1	FAL Change (based on VAL46) VAL156+	0.255	0.003 †
2	Education on Restraints VAL4+		
2	Aggressive Cog/Com Care Strategy VAL9+		
2	Falls Improvement Scale VAL111+		
	Flare up of infections (MEGAQI; INFOX)		
1	Facility Management Contract Change VAL11-	0.159	0.062 ‡
1	Use of QA nurse VAL16+		
1	INF Change (based on VAL46) VAL164+	0.206	0.014 †
1	Match of Chart & Care Plan VAL173+	0.172	0.065 †
2	NP on staff VAL19+		
2	DON employed <12M VAL51-		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+		
2	5%+ RN, LPN Float, Contract VAL53-		
2	Lic Staff turnover last 6mo (%Deciles) VAL55-	0.184	0.036 ‡
2	Num CQI Approaches in Use VAL64+		
2	Number of CNA Training Topics VAL78+	0.151	0.074
2	Long Stay Staff deciles VAL90+		
2	Infectns Improvement Scale VAL120+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
	Mobility change (LTCQ; MOB01)		
1	Facility Management Contract Change VAL11-		
1	Cont Ed Fx Decline VAL34+		
1	Effort at Mobility Enhancement VAL35+		
1	CDCPI-Functional VAL37+	-0.199	0.020 ‡
1	CDCPI3-Cross Domain Quality Response VAL42+		
1	Observation of Movement Scale VAL72+		
1	Total involvement in Care Planning VAL147+		
1	MOB Change (based on VAL46) VAL155+		
1	Match of Chart & Care Plan VAL172+		
2	General Management Instability VAL10-		
2	Incontinence Management VAL32+		
2	Focus on Incontinence VAL36+		
2	Ownership Change VAL49-		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+		
2	PT Asst FTE/100 Beds VAL83+		
2	Level of OT PT Staffing VAL87+		
2	MobWalk Improvement Scale VAL110+		
2	PT FTE/100 Beds VAL146+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
	Depressed mood change (LTCQ; MOD03)		
1	Complex Mental Health Care on Site VAL1+		
1	Licensed Nurse Involved in Care Planning VAL6+		
1	Screen, assess, manage pain depression VAL23+		
1	Formal Delirium/Depression Approach VAL67+		
1	Frequency of Comprehensive Assessments VAL80+		
1	Activities in NH VAL93+	-0.143	0.095 †
1	MOD Change (based on VAL46) VAL151+	-0.179	0.037 †
1	Match of Chart & Care Plan VAL170+		
2	General Management Instability VAL10-		
2	Facility Management Contract Change VAL11-		
2	Behavioral Items VAL18+		
2	NP on staff VAL19+		
2	Med Dir reviews Drugs last 30 days VAL20+		
2	Daily Screening of mood VAL24+		
2	Medications Committee VAL25+		
2	CQI for pain VAL26+		
2	CDCPI-Ambiance VAL41+		
2	CDCPI3-Cross Domain Quality Response VAL42+		
2	Percent Single Bedded Rooms, Deciles VAL44+		
2	Ownership Change VAL49-		
2	5%+ RN, LPN Float, Contract VAL53-		
2	Lic Staff turnover last 6mo (%,Deciles) VAL55-		
2	CNA Involved in Care Planning VAL57+		
2	Record of MH Prof VAL65+		
2	Presence of MH prof VAL66+		
2	Personalized Rooms VAL70+		
2	Long Stay Staff deciles VAL90+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
2	Informal Pathways Communication VAL97+		
2	Vigilance in Monitoring Psyc Status VAL100+		
2	Mood Improvement Scale VAL106+		
2	Total involvement in Care Planning VAL147+		
Tube feeding prevalence (RAMSEY; NUT01)			
1	NUT Change (based on VAL46) VAL159+	0.165	0.054 †
2	DON employed <12M VAL51-		
2	Nutrition CQI VAL79+		
2	Long Stay Staff deciles VAL90+		
2	Feedtube Improvement Scale VAL115+	0.396	0.000
Inadequate management of pain (MEGAQI; PA10X)			
1	Formal Communication VAL17+		
1	NP on staff VAL19+		
1	Screen, assess, manage pain depression VAL23+		
1	CQI for pain VAL26+		
1	CDCPI-Clinical Complications VAL40+	0.176	0.037 †
1	CDCPI3-Cross Domain Quality Response VAL42+		
1	Pain Assessment VAL45+		
1	Pain Change VAL46+		
1	Pain Care Planning Specificity VAL47+		
1	Match of MDS & Care Plan VAL48+		
1	Poor Pain Assessment Policies as25h VAL58-		
1	Poor Pain Education VAL59-		
1	No Stand Pain Asmt Admin and (Wkly or Qrtly) VAL61-		
1	Num CQI Approaches in Use VAL64+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
1	Frequency of Comprehensive Assessments VAL80+	-0.160	0.059 ‡
1	Match of Chart & Care Plan VAL168+	0.263	0.002 †
2	General Management Instability VAL10-		
2	Use of QA nurse VAL16+		
2	Med Dir reviews Drugs last 30 days VAL20+		
2	Medications Committee VAL25+		
2	Ownership Change VAL49-		
2	DON employed <12M VAL51-		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+		
2	5%+ RN, LPN Float, Contract VAL53-		
2	Lic Staff turnover last 6mo (%Deciles) VAL55-	0.155	0.077 ‡
2	30%+ Six Mo CNA Turnover VAL56-		
2	CNA Involved in Care Planning VAL57+		
2	Number of CNA Training Topics VAL78+		
2	Long Stay Staff deciles VAL90+		
2	Activities in NH VAL93+		
2	Pain Improvement Scale VAL113+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
	Pain change (LTCQ; PAN01)		
1	Formal Communication VAL17+		
1	NP on staff VAL19+		
1	Screen, assess, manage pain depression VAL23+		
1	CQI for pain VAL26+	-0.147	0.084 ‡
1	CDCPI-Clinical Complications VAL40+		
1	CDCPI3-Cross Domain Quality Response VAL42+		
1	Pain Assessment VAL45+	0.169	0.047 †
1	Pain Change VAL46+	0.148	0.082 †
1	Pain Care Planning Specificity VAL47+	-0.204	0.016 ‡
1	Match of MDS & Care Plan VAL48+		
1	Poor Pain Assessment Policies as25h VAL58-		
1	Poor Pain Education VAL59-		
1	No Stand Pain Asmt Admin and (Wkly or Qrtly) VAL61-		
1	Num CQI Approaches in Use VAL64+		
1	Frequency of Comprehensive Assessments VAL80+	0.158	0.061
1	Match of Chart & Care Plan VAL168+		
2	General Management Instability VAL10-		
2	Use of QA nurse VAL16+		
2	Med Dir reviews Drugs last 30 days VAL20+		
2	Medications Committee VAL25+		
2	Ownership Change VAL49-		
2	DON employed <12M VAL51-		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+		
2	5%+ RN, LPN Float, Contract VAL53-	0.223	0.010 ‡
2	Lic Staff turnover last 6mo (%Deciles) VAL55-		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized Regression Coefficient	p-value
Level	QI & Validation Scale		
2	30%+ Six Mo CNA Turnover VAL56-		
2	CNA Involved in Care Planning VAL57+	0.153	0.072
2	Number of CNA Training Topics VAL78+		
2	Long Stay Staff deciles VAL90+		
2	Activities in NH VAL93+		
2	Pain Improvement Scale VAL113+		
Pressure ulcer prevalence, high & low risk (CHSRA; PRU01)			
1	Facility Management Contract Change VAL11-	0.148	0.082 ‡
1	Use of QA nurse VAL16+		
1	Formal Communication VAL17+		
1	Skin Care Preventive Stratgz VAL29+		
1	Skin Care Prev Stratgz walk-through VAL31+		
1	CDCPI-Clinical Complications VAL40+		
1	CDCPI3-Cross Domain Quality Response VAL42+	-0.142	0.094 ‡
1	Num CQI Approaches in Use VAL64+	0.142	0.094 ‡
1	Observed PU, Burns Tx & Prevention VAL77+		
1	Training & Policy for Suspicious Skin VAL99+		
1	PRU Change (based on VAL46) VAL165+	0.243	0.004 †
1	Match of Chart & Care Plan VAL174+	0.216	0.011 †
2	Licensed Nurse Involved in Care Planning VAL6+		
2	Incontinence Management VAL32+		
2	Focus on Incontinence VAL36+		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+		
2	5%+ RN, LPN Float, Contract VAL53-	0.267	0.002 ‡
2	Lic Staff turnover last 6mo (%Deciles) VAL55-		
2	30%+ Six Mo CNA Turnover VAL56-		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
2	CNA Involved in Care Planning VAL57+		
2	Number of CNA Training Topics VAL78+		
2	% Res w/Tx Plans for Weight Loss VAL81+	0.157	0.064 †
2	Emphasis on Mission VAL89+		
2	Long Stay Staff deciles VAL90+		
2	PressUlc Improvement Scale VAL121+	0.144	0.091 ‡
2	Total involvement in Care Planning VAL147+		
	Pressure ulcer change (LTCQ; PRU04)		
1	Facility Management Contract Change VAL11-		
1	Use of QA nurse VAL16+		
1	Formal Communication VAL17+		
1	Skin Care Preventive Stratgz VAL29+		
1	Skin Care Prev Stratgz walk-through VAL31+		
1	CDCPI-Clinical Complications VAL40+	-0.194	0.021 ‡
1	CDCPI3-Cross Domain Quality Response VAL42+		
1	Observed PU, Burns Tx & Prevention VAL77+		
1	Training & Policy for Suspicious Skin VAL99+		
1	PRU Change (based on VAL46) VAL165+		
1	Match of Chart & Care Plan VAL174+	0.144	0.090 †
2	Licensed Nurse Involved in Care Planning VAL6+		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+	-0.153	0.074 ‡
2	5%+ RN, LPN Float, Contract VAL53-		
2	Lic Staff turnover last 6mo (%Deciles) VAL55-		
2	30%+ Six Mo CNA Turnover VAL56-		
2	Number of CNA Training Topics VAL78+		
2	% Res w/Tx Plans for Weight Loss VAL81+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	Hypothesis	QI & Validation Scale	Standardized Regression	
			Coefficient	p-value
2		Emphasis on Mission VAL89+		
2		Long Stay Staff deciles VAL90+		
2		Total involvement in Care Planning VAL147+		
		Restraint prevalence (CHSRA; RES01)		
1		Education on Restraints VAL4+	0.215	0.010
1		CDCPI-Ambiance VAL41+		
1		CDCPI3-Cross Domain Quality Response VAL42+		
1		Physical Restraints VAL75+	0.344	0.000 †
1		RES Change (based on VAL46) VAL158+	0.211	0.012
2		Complex Mental Health Care on Site VAL1+		
2		Facility Management Contract Change VAL11-		
2		Use of QA nurse VAL16+	-0.146	0.082 ‡
2		CDCPI-Functional VAL37+		
2		CDCPI3-Cross Domain Quality Response VAL42+		
2		Num CQI Approaches in Use VAL64+		
2		Observed PU, Burns Tx & Prevention VAL77+	0.221	0.008
2		Emphasis on Mission VAL89+		
2		Restrnt Improvement Scale VAL114+	0.389	0.000
		Little or no activities prevalence (CHSRA; SOC02)		
1		CDCPI-Psychosocial VAL39+	-0.211	0.012 ‡
1		CDCPI-Ambiance VAL41+	0.158	0.062
1		CDCPI3-Cross Domain Quality Response VAL42+		
1		Activities in NH VAL93+		
1		SOC Change (based on VAL46) VAL167+		
2		Preventative Activities VAL7+		
2		Screen, assess, manage pain depression VAL23+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis		Standardized	
Level	QI & Validation Scale	Regression Coefficient	p-value
2	Percent Single Bedded Rooms, Deciles VAL44+		
2	30%+ Six Mo CNA Turnover VAL56-		
2	Personalized Rooms VAL70+		
2	Long Stay Staff deciles VAL90+		
2	NoActivt Improvement Scale VAL123+		
Walking performance (MEGAQI; WAL0X)			
1	Preventative Activities VAL7+		
1	Cont Ed Fx Decline VAL34+		
1	Effort at Mobility Enhancement VAL35+		
1	CDCPI-Functional VAL37+		
1	CDCPI3-Cross Domain Quality Response VAL42+		
1	Observation of Movement Scale VAL72+		
1	PT Asst FTE/100 Beds VAL83+		
1	PT FTE/100 Beds VAL146+		
1	Total involvement in Care Planning VAL147+		
1	MOB Change (based on VAL46) VAL155+		
1	Match of Chart & Care Plan VAL172+		
2	Incontinence Management VAL32+		
2	Focus on Incontinence VAL36+		
2	CDCPI-Ambiance VAL41+		
2	CDCPI3-Cross Domain Quality Response VAL42+		
2	CMI-Adjusted (RN+LPN FTE)/BED VAL52+		
2	Level of OT PT Staffing VAL87+		
2	MobWalk Improvement Scale VAL110+		

† responsive element

‡ preventive element

Relationship Between Chronic Quality Indicators and Hypothesized Validation Scales (Note: Shaded Items are Counter to the Hypothesis)

Hypothesis Level	QI & Validation Scale	Standardized Regression Coefficient	p-value
	Weight loss (LTCQ; WGT01)		
1	CNA Involved in Care Planning VAL57+	-0.167	0.051 ‡
1	Nutrition CQI VAL79+		
1	% Res w/Tx Plans for Weight Loss VAL81+		
1	Restorative Eating Care Provided VAL92+		
1	Total involvement in Care Planning VAL147+	-0.153	0.075 ‡
1	WGT Change (based on VAL46) VAL160+		
2	5%+ RN, LPN Float, Contract VAL53-		
2	Lic Staff turnover last 6mo (%Deciles) VAL55-		
2	30%+ Six Mo CNA Turnover VAL56-		
2	Frequency of Comprehensive Assessments VAL80+		
2	LowBMI Improvement Scale VAL116+		

† responsive element

‡ preventive element